

Title: Program Director Vacancy for Engineering Research Centers Program--Vacancy Announcement--Dear Colleague Letter

Date: March 13, 2002

Dear Colleague,

**PROGRAM DIRECTOR VACANCY FOR ENGINEERING RESEARCH CENTERS (ERC)
PROGRAM (Civil Engineering)**

I am pleased to announce an opening for a senior-level civil engineer with demonstrated experience in cross-disciplinary engineering research management to serve as a Program Director for the Engineering Research Centers (ERC) Program, within the Division of Engineering Education and Centers (EEC), Directorate for Engineering. The primary responsibility of this position is providing oversight to the three NSF-funded Earthquake Engineering Research Centers (EERC). Positions will be filled on a one or two year Visiting Scientist Appointment, Temporary Appointment or under the terms of the Intergovernmental Personnel Act (IPA). Temporary and Visiting Scientist appointments will be made under the Excepted Authority of the NSF Act. For temporary appointments of more than one year, the usual civil service benefits (retirement, health and life insurance) are applicable. For Visiting Scientist appointments, individuals are in a non-pay leave status from the home institution and are appointed to NSF's payroll as a Federal employee. NSF withholds Social Security and provides reimbursement for fringe benefits. For IPA assignments, the individual remains on the payroll of his/her institution and the institution continues to administer pay and benefits. NSF reimburses the institution for NSF's negotiated share of the costs. Individuals eligible for an IPA assignment include employees of State and local government agencies, institutions of higher education, Indian tribal governments, federally funded research and development centers and qualified nonprofit organizations. The individual remains an employee of the home institution.

ERCs play critical roles in research, education, human resource development and diversity, and industrial collaboration and technology transfer. Each focuses cross-disciplinary teams of faculty and students on developing fundamental understanding and the development and validation of technologies needed to realize a well-defined class of engineered systems with the potential to spawn whole new industries or radically transform the product lines, processing technologies, design practices, or service delivery methodologies of current industries. ERC faculty, students, and industry partners integrate discovery and learning in a cross-disciplinary environment that reflects the complexities and realities of real-world technology and product development. NSF views ERCs as change agents for academic engineering programs and the engineering community at large and expects ERC innovations in research and education to add to current knowledge, affect industrial practice, impact curricula at all levels from pre-college to life-long learning, employ and reach out to a population that reflects the diversity of the United States, and be disseminated to and beyond academic and industry partners. Each ERC is funded by NSF for up to ten years and undergoes two renewal reviews and annual reviews. Other information about the ERC Program may be found at <http://www.eng.nsf.gov/eec/erc.htm> and detailed descriptions of the activities of the ERCs and the EERCs may be found in fact sheets describing the individual centers at <http://www.nsf.gov/pubs/2000/nsf00137/start.htm>.

The oversight of ERCs and EERCs is a complex and interesting endeavor that requires background in research management, strategic planning, and integration of research findings into educational materials, and technology transfer. The successful candidate will be a member of the team of Program Directors and staff responsible for the selection and post-award oversight and review of ERCs and EERCs and will work under the guidance of the Leader of the ERC Program, who is responsible for overall management of the ERC Program. The successful candidate will be responsible for the oversight of three Earthquake Engineering Research Centers, which focus on earthquake hazard mitigation and societal response to earthquakes, and any new ERCs that might be funded in civil infrastructure systems. The successful candidate will be responsible for coordinating the EERCs to assure effective collaboration among them and with the larger earthquake engineering and earthquake hazard mitigation communities. To carry out these post-award oversight responsibilities, the Program Director will work with a team of other Program Directors from NSF who specialize in structural engineering, geotechnical engineering, earth sciences, decision modeling, and societal response to hazards. The position also involves coordination of the EERCs' and infrastructure-related ERCs' activities with the research programs funded by the ENG/Division of Civil and Mechanical Systems, other divisions of the NSF, and other relevant federal agencies, including those under the National Earthquake Hazards Reduction Program.

In summary, this position encompasses the following activities:

- Specific oversight of the Earthquake Engineering Research Centers and other civil infrastructure-related ERCs, using peer review as a tool to develop the centers' capabilities, review their performance, and determine continuation, renewal, or termination; the oversight will encompass research management, industrial collaboration, education and outreach, and center management;
- Development of strategies to promote synergy among the three EERCs and infrastructure-related ERCs and programs within and outside the NSF, and;
- Management of review panels and award processing for civil infrastructure systems proposals submitted to the ERC program under biennial program solicitations.

The position requires demonstrated experience managing cross-disciplinary research in a university/industry environment, as an academic, industrial, or government manager of industry/university research programs. Experience in managing cross-disciplinary research programs and the transfer of research knowledge to industry and/or policy makers is desirable as well. The position advertised is for a civil engineer, with training and or experience in structural engineering, geotechnical engineering, or civil infrastructure systems. Background in risk analysis, modeling, and the interface of civil infrastructure systems with policy makers is desirable. Experience with the complexities of developing engineered systems, as opposed to devices or components, an understanding of the interface between research and technological innovation, and the ability to work in and manage teams are all highly desirable. An interest in working with the scientific and engineering community to enhance the effectiveness of research and educational programs to produce graduates who are more effective in practice is also important, as is both depth and breadth of technical expertise. The Program Director must have a doctoral degree in civil engineering, with a structural, geotechnical, or civil infrastructure systems background; research or industrial experience in earthquake engineering is desirable. Current affiliation with one of the lead or core partner institutions involved in any of the three EERCs would preclude consideration of the applicant because NSF's conflict-of-interest guidelines preclude oversight of an award from the Program Director's employer. Please see the EERC fact sheets on the following Website for a list of their lead and core partner institutions. <http://www.nsf.gov/pubs/2000/nsf00137/start.htm>

Program Director positions at the National Science Foundation provide a challenging experience and an excellent opportunity to encourage and support engineering and science research and education. This position also provides an opportunity to work with academe, industry, federal, state and local agencies to develop strategic plans to advance technology and produce graduates who are more effective in practice. The successful candidate will work with other NSF Program Directors in formulating and implementing improvements in the ERC Program; developing cooperation among government, academe, and industry; fostering outreach to underrepresented groups; and providing leadership within NSF and the research community. The position requires a doctorate with a minimum of ten years of academic, government, or industry experience following the doctorate degree. We are very interested in attracting qualified women and underrepresented minority candidates or candidates with disabilities to this position.

I would appreciate any nominations that you may have for suitable candidates. Should you or your colleagues be interested in this position, please contact the EEC Search Committee Coordinator, Mary F. Poats (mpoats@nsf.gov) and forward a curriculum vitae to her by April 29, 2002. Applications will be reviewed after this date, though the position will remain open until filled.

For questions or further information, please contact:

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Sincerely,

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